

FFFFFF	000000000	RRRRRRRRRRRR	RRRRRRRRRRRR	TTTTTTTTTTTT	LLL	
FFFF	000000000	RRRRRRRRRRRR	RRRRRRRRRRRR	TTTTTTTTTTTT	LLL	
FFFF	000000000	RRRRRRRRRRRR	RRRRRRRRRRRR	TTTTTTTTTTTT	LLL	
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFFF	000	000	RRRRRRRRRRRR	RRRRRRRRRRRR	TTT	LLL
FFFF	000	000	RRRRRRRRRRRR	RRRRRRRRRRRR	TTT	LLL
FFFF	000	000	RRRRRRRRRRRR	RRRRRRRRRRRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000	000	RRR	RRR	TTT	LLL
FFF	000000000	RRR	RRR	RRR	TTT	LLL
FFF	000000000	RRR	RRR	RRR	TTT	LLL
FFF	000000000	RRR	RRR	RRR	TTT	LLL

\*\*FILE\*\*ID\*\*FORENCOMF

G 2

FFFFFF	000000	RRRRRRRR	EEEEEEEEE	NN	NN	CCCCCCCC	000000	MM	MM	FFFFFF			
FFFFFF	000000	RRRRRRRR	EEEEEEEEE	NN	NN	CCCCCCCC	000000	MM	MM	FFFFFF			
FF	00	00	RR	RR	EE	NN	NN	CC	00	00	MMMM	MMMM	FF
FF	00	00	RR	RR	EE	NN	NN	CC	00	00	MMMM	MMMM	FF
FF	00	00	RR	RR	EE	NNNN	NN	CC	00	00	MM	MM	FF
FF	00	00	RR	RR	EE	NNNN	NN	CC	00	00	MM	MM	FF
FF	00	00	RRRRRRR	EEEEEEE	NN	NN	NN	CC	00	00	MM	MM	FFFF
FF	00	00	RRRRRRR	EEEEEEE	NN	NN	NN	CC	00	00	MM	MM	FFFF
FF	00	00	RR	RR	EE	NN	NNNN	CC	00	00	MM	MM	FF
FF	00	00	RR	RR	EE	NN	NNNN	CC	00	00	MM	MM	FF
FF	00	00	RR	RR	EE	NN	NN	CC	00	00	MM	MM	FF
FF	00	00	RR	RR	EE	NN	NN	CC	00	00	MM	MM	FF
FF	000000	RR	RR	EEEEEEEEE	NN	NN	CCCCCCCC	000000	MM	MM	FF		
FF	000000	RR	RR	EEEEEEEEE	NN	NN	CCCCCCCC	000000	MM	MM	FF		

LL	IIIIII	SSSSSSSS
LL	IIIIII	SSSSSSSS
LL	II	SS
LLLLLLLLL	IIIIII	SSSSSSSS
LLLLLLLLL	IIIIII	SSSSSSSS

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(2)	56	HISTORY ; Detailed Current Edit History
(3)	85	DECLARATIONS
(4)	129	FOR\$ENCODE_MF - ENCODE formatted

```
0000 1 .TITLE FOR$ENCODE_MF - entry point for FORTRAN ENCODE FORMATTED
0000 2 .IDENT /1-011/ File: FORENCOMF.MAR Edit: JAW1011
0000 3 :
0000 4 :*****
0000 5 :*
0000 6 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 20 :*
0000 21 :* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0000 22 :* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 23 :*
0000 24 :*
0000 25 :*****
0000 26 :
0000 27 :
0000 28 :++
0000 29 : FACILITY: FORTRAN Support Library - user callable
0000 30 :
0000 31 : ABSTRACT:
0000 32 :
0000 33 : This module contains the entry point for the FORTRAN
0000 34 : ENCODE FORMATTED I/O statement. It is simply
0000 35 : a call to FOR$IO_BEG with bits in R0 which describe the
0000 36 : parameter list. FOR$IO_BEG interprets the parameters.
0000 37 :
0000 38 : MAINTENANCE NOTE:
0000 39 : The transfer vector (RTLVECTOR+ALLGBL) must have the following:
0000 40 :
0000 41 : .TRANSFER      FOR$ENCODE_MF
0000 42 : .MASK          FOR$IO_BEG
0000 43 : BRW           FOR$ENCODE_MF+2
0000 44 :
0000 45 : This puts the correct mask in entry vector, that is FOR$IO_BEG entry mask.
0000 46 : Furthermore this module must only use R0 and R1
0000 47 : since any other register might not be in the entry mask for FOR$IO_BEG.
0000 48 :
0000 49 : ENVIRONMENT: User access mode; mixture of AST level or not
0000 50 :
0000 51 : AUTHOR:      Richard B. Grove, CREATION DATE: 28-May-78
0000 52 :
0000 53 : MODIFIED BY:
0000 54 :      T. Hastings, 29-July-78
```

0000 56 .SBTTL HISTORY ; Detailed Current Edit History  
0000 57  
0000 58  
0000 59 : Edit History for Version 1  
0000 60 :  
0000 61 : 0-10 - Add comment about vectors. TNH 23-June-78  
0000 62 : 0-12 - Pass arg in R0, not ROR, add comments. TNH 29-July-78  
0000 63 : 1-001 - Update version number and copyright notice. JBS 16-NOV-78  
0000 64 : 1-002 - Change statement type symbols to be LUB\$K... JBS 07-DEC-78  
0000 65 : 1-003 - Change statement type symbols to be ISB\$K... JBS 11-DEC-78  
0000 66 : 1-004 - Add A,, to the PSECT directive. JBS 22-DEC-78  
0000 67 : 1-005 - Add FOR\$READ\_KF, FOR\$READ\_KO, FOR\$REWRITE\_SF, FOR\$REWRITE\_SO,  
0000 68 : FOR\$READ\_IF, -FOR\$READ\_IO, -FOR\$WRITE\_IF, FOR\$WRITE\_IO,  
0000 69 : FOR\$READ\_KU, FOR\$REWRITE\_SU,  
0000 70 : SBL 2-May-1979  
0000 71 : 1-006 - Remove all entry points that need object time formatting,  
0000 72 : putting them in FORSENTRY\_OBJ so that we can arrange to  
0000 73 : load the format compiler only when it is needed.  
0000 74 : JBS 26-JUN-1979  
0000 75 : 1-007 - Remove entry point FOR\$ENCODE\_MF; we will code a new module  
0000 76 : for it and FOR\$IO\_BEG, to see how much I/O initiation time  
0000 77 : improves. JBS 02-JUL-1979  
0000 78 : 1-008 - Do likewise for FOR\$READ\_DU and FOR\$WRITE\_DU. JBS 03-JUL-1979  
0000 79 : 1-009 - Remove all entry points except FOR\$ENCODE\_MF; each of the  
0000 80 : others gets its own module so we can selectively load  
0000 81 : the necessary UDF and REC modules. JBS 09-JUL-1979  
0000 82 : 1-010 - New parameter format for FOR\$IO\_BEG. SBL 5-Dec-1979  
0000 83 : 1-011 - Change BRW FOR\$IO\_BEG+2 to JMP G^FOR\$IO\_BEG+2. JAW 21-Feb-1981

```
0000 85 .SBTTL DECLARATIONS
0000 86
0000 87 :
0000 88 : INCLUDE FILES:
0000 89 :
0000 90
0000 91 $FORPAR ; Define inter-module FORTRAN symbols
0000 92 $ISBDEF ; Define statement type symbols
0000 93
0000 94 :
0000 95 : EXTERNAL SYMBOLS:
0000 96 :
0000 97
0000 98 .DSABL GBL ; Declare all external symbols
0000 99 .EXTRN FOR$$IO_BEG ; common I/O statement processing
0000 100 :+
0000 101 : The following references are to make sure the necessary UDF and REC
0000 102 : modules are loaded. These are the routines which are called through
0000 103 : the dispatch tables in FOR$$DISPAT.
0000 104 :-+
0000 105 .EXTRN FOR$$UDF_WF0, FOR$$UDF_WF1, FOR$$UDF_WF9
0000 106 .EXTRN FOR$$REC_WMF0, FOR$$REC_WMF1, FOR$$REC_WMF9
0000 107
0000 108 :
0000 109 : MACROS:
0000 110 :
0000 111 : NONE
0000 112 :
0000 113 : PSECT DECLARATIONS:
0000 114 :
0000 115
00000000 116 .PSECT _FOR$CODE PIC,USR,CON,REL,LCL,SHR,EXE,RD,NOWRT,LONG
0000 117
0000 118 :
0000 119 : EQUATED SYMBOLS:
0000 120 :
0000 121
0000 122
0000 123 :
0000 124 : OWN STORAGE:
0000 125 :
0000 126 : NONE
0000 127 :
```

0000 129 .SBTTL FOR\$ENCODE\_MF - ENCODE formatted  
0000 130  
0000 131 :++  
0000 132 : FUNCTIONAL DESCRIPTION:  
0000 133 :  
0000 134 : Initialize the FORTRAN I/O system to perform  
0000 135 : a ENCODE formatted I/O statement.  
0000 136 :  
0000 137 : CALLING SEQUENCE:  
0000 138 :  
0000 139 : CALL FOR\$ENCODE\_MF (char\_cnt.rlu.v, format\_adr.mbu.ra, usr\_buf\_adr.wt.ra  
0000 140 : [, err\_adr.j.r [, end\_adr.j.r]])  
0000 141 :  
0000 142 : INPUT PARAMETERS:  
0000 143 :  
0000 144 : unit.rlu.v logical unit number  
0000 145 : format\_adr.mbu.ra adr. of compiled format byte array  
0000 146 : usr\_buf\_adr.wt.ra adr. of user's buffer  
0000 147 : [err\_adr.j.r] optional ERR= address  
0000 148 : [end\_adr.j.r] optional END= address  
0000 149 :  
0000 150 : IMPLICIT INPUTS:  
0000 151 :  
0000 152 : NONE except those used by FOR\$\$IO\_BEG.  
0000 153 :  
0000 154 : OUTPUT PARAMETERS:  
0000 155 :  
0000 156 : NONE  
0000 157 :  
0000 158 : IMPLICIT OUTPUTS:  
0000 159 :  
0000 160 : NONE except those left by FOR\$\$IO\_BEG.  
0000 161 :  
0000 162 : COMPLETION CODES:  
0000 163 :  
0000 164 : NONE  
0000 165 :  
0000 166 : SIDE EFFECTS:  
0000 167 :  
0000 168 : NONE except those of FOR\$\$IO\_BEG.  
0000 169 :  
0000 170 :--  
0000 171 :  
0000 172 FOR\$ENCODE MF:: .MASK FOR\$\$IO BEG  
0000 173 MOVZBL #ISBSK ST TY WMF, R0 : Statement type  
0000 174 JMP G^FOR\$\$IO\_BEG+2 : branch past call mask  
0000 175  
0000 176  
0000 177 .END

50 0B 0000' 0000  
00000002'GF 17 9A 0002  
0005 000B  
000B 000B  
000B 000B

FOR\$ENCODE MF  
Symbol table

M 2  
- entry point for FORTRAN ENCODE FORMATT 15-SEP-1984 23:51:30 VAX/VMS Macro V04-00  
6-SEP-1984 10:55:00 [FORRTL.SRC]FORENCOMF.MAR;1 Page 5  
(4)

FOR\$\$IO\_BEG  
FOR\$\$REC\_WMF0  
FOR\$\$REC\_WMF1  
FOR\$\$REC\_WMF9  
FOR\$\$UDF\_WF0  
FOR\$\$UDF\_WF1  
FOR\$\$UDF\_WF9  
FOR\$ENCODE MF  
ISB\$K\_ST\_TY\_WMF

\*\*\*\*\* X 00  
00000000 RG 01  
= 0000000B

FOR  
1-0

PSECT name  
-----  
ABS  
\_FOR\$CODE

PSECT name	Allocation	PSECT No.	Attributes	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE
	00000000 ( 0.)	00 ( 0.)	NOPIC USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE
	0000000B ( 11.)	01 ( 1.)	PIC USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG

! Psect synopsis !  
+-----+  
! Performance indicators !  
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	31	00:00:00.08	00:00:00.80
Command processing	117	00:00:00.58	00:00:03.15
Pass 1	124	00:00:01.27	00:00:04.84
Symbol table sort	0	00:00:00.19	00:00:00.28
Pass 2	48	00:00:00.49	00:00:01.67
Symbol table output	3	00:00:00.02	00:00:00.02
Psect synopsis output	2	00:00:00.00	00:00:00.04
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	327	00:00:02.66	00:00:10.83

The working set limit was 900 pages.  
6671 bytes (14 pages) of virtual memory were used to buffer the intermediate code.  
There were 20 pages of symbol table space allocated to hold 187 non-local and 0 local symbols.  
177 source lines were read in Pass 1, producing 8 object records in Pass 2.  
9 pages of virtual memory were used to define 2 macros.

Macro library name  
-----  
\$255\$DUA28:[FORRTL.OBJ]FORRTL.MLB;1  
\$255\$DUA28:[SYSLIB]STARLET.MLB;2  
TOTALS (all libraries)

! Macro library statistics !  
+-----+

Macros defined

2  
0  
2

183 GETS were required to define 2 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$:FORENCOMF/OBJ=OBJ\$:FORENCOMF MSRC\$:FORENCOMF/UPDATE=(ENH\$:FORENCOMF)+LI

0180 AH-BT13A-SE  
VAX/VMS V4.0

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